

**We claim:**

1. A process for the preparation of expanded millet, the process comprising:
  - a. equilibrating millet grains to optimum moisture by adding additional water and tempering or resting in order to impart pseudo-elastic texture to decorticated millet endosperm,
  - b. loosening intracellular intactness of the endosperm by mechanical means without developing fissures to obtain bumped millet,
  - c. drying the bumped millet to optimum level for puffing,
  - d. grading the millet obtained in step (c) to near uniform size by screening through appropriate sieves or screens,
  - e. subjecting the grains to high temperature short time treatment in salt, sand or air or such other heat transfer media to prepare expanded millet.
2. A process as claimed in claim 1 wherein step (a) above is carried out on hydrothermally treated and decorticated finger millet.
3. A process as claimed in claim 1 wherein the decorticated millet is equilibrated to 15 - 35% moisture level and subjected to bumping or flattening to 0.7 - 1.0 mm thickness and 1.5 - 1.6 mm diameter, mechanically or manually, without causing visible cracks.
4. A process as claimed in claim 1 wherein the bumped millet are dried in shade or sun or in mechanical dryer to 10 - 20% moisture content and subjected to high temperature - short time treatment in sand, salt, air or a heat transfer media heated to 200 - 250°C for 15 - 45 seconds.
5. A process as claimed in claim 1 wherein step (d) is carried out to obtain millet grains with a thickness of 0.8 - 1.0 mm and diameter 1.5 - 1.6 mm.
6. A process as claimed in claim 1 wherein the expanded millet prepared is pre-cooked to provide 95-100% carbohydrate digestibility.
7. A process as claimed in claim 1 wherein the millet is selected from the group consisting of finger millet, pearl millet, sorghum and minor millets containing fully or partially gelatinized starch.
8. A process as claimed in claim 1 wherein the bumped grains are subjected to high temperature short time treatment in sand or salt, heated to 200 - 250°C for 30 - 40 sec and the sand or salt sieved off immediately, or air heated to 180 - 200°C or in a gun popper or fluidized bed dryer, microwave and infra red heaters.

PRINTED  
AVAILABLE  
COPY

9. Expanded millet when prepared by the process of claim 1 for use as a ready-to-eat snack, supplementary food, alone or in combination with other edible cereals, pulses, oil seeds, fruits and vegetables, and as an ingredient in confectionery.
10. A process as claimed in claim 1 wherein the expanded millet is freed from adhering heat transfer media by brushing or aspiration.
11. A process as claimed in claim 1 wherein the expanded millet obtained is free from seed born microflora.
12. A process as claimed in claim 1 wherein the expansion ratio of the puffed grains range from 5 to 8 times of its original volume without loss of its original spherical shape and with smooth glossy surface, crispy and spongy texture.
13. A process as claimed in claim 1 wherein the expanded millet contains 4 - 8% protein, 1 - 1.5% fat, 13 -16% dietary fiber with 98% carbohydrate digestibility.
14. A process as claimed in claim 1 wherein the expanded millet is coated with an edible, fruit or vegetable powder, sweetening agent selected from sugar, malt powder, malt extract, and edible colors.

20

25

30

PCT  
AVAILABLE COPY